Aqueous electrocoat materials, their use in processes for coating electrically conductive substrates, and the use of bismuth compounds in these aqueous electrocoat materials

Abstract

Electrocoat material comprising bismuth compounds, comprising

- (A) at least one self-crosslinking and/or externally crosslinking binder containing (potentially) cationic or anionic groups and reactive functional groups which
 - (i) with themselves or with complementary reactive functional groups in the selfcrosslinking binder, or
 - (ii) in the case of the externally crosslinking binder, with complementary reactive functional groups present in crosslinking agents (B)

are able to undergo thermal crosslinking reactions,

- (B) if desired, at least one crosslinking agent comprising the complementary reactive functional groups, and
- (C) at least one bismuth compound.